



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,992	12/29/2003	Steven Maurice Sikorski	1595	8250

23623 7590 06/28/2005

AMIN & TUROCY, LLP
1900 EAST 9TH STREET, NATIONAL CITY CENTER
24TH FLOOR,
CLEVELAND, OH 44114

EXAMINER

LAY, MICHELLE K

ART UNIT	PAPER NUMBER
----------	--------------

2672

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/748,992	SIKORSKI, STEVEN MAURICE	
	Examiner	Art Unit	
	Michelle K. Lay	2672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

h

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "904" in Fig. 10 and "1004" in the specification on page 21, line 24 have both been used to designate a battery pack. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claim **14** is objected to because of the following informalities: Claim **14** is dependent on claim 12 however; claim 12 is a system claim whereas claim 14 is a method claim. It is assumed claim **14** is dependent on claim 13, which is a method claim. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims **1, 2, 5, 6, 7, 16** are rejected under 35 U.S.C. 102(e) as being anticipated by Manchester (US Publication No. US 2004/0201595 A1).

In regards to claim **1, 5, 6, 7, 16** –

Manchester discloses a self-orienting display that senses the characteristics of an object and automatically rotates and reformats a display image in accordance with those characteristics [0019]. Fig. 1 is an illustration of a self-orienting display (100) comprising a display device (12) (claims **1, 16**: display component), a display image (14), a sensor (16), and optional control buttons (18). The self-orienting display (12) may be in the form of any appropriate display device capable of providing the display image (14), such as hand held devices (claim **1**: a mobile device comprising a display component) and wireless devices (e.g., cellular devices including telephones, PDAs, portable computers) (claim **7**) [0020]. A gyroscopic sensor is an example of an appropriate sensor for sensor (16) (claim **6**). The sensor (16) may include a single sensor or a plurality of sensors [0020]. The sensors (16) can be positioned on the

viewer (36) of Fig. 8 (claim 5) and/or on the display device (12) to sense the orientation of the viewer and/or display device (claim 16: means for determining user desire orientation for rendering objects) [0027]. The display image (14) is oriented with respect to the orientation of the display (12). As the display device (12) oriented as shown in Fig. 1 is rotated, the display image (14) is automatically oriented, such that the appearance of the display image (14) appears to remain approximately stable regardless of the orientation of the display device (12) (claim 1: automatically orients display based on user perspective) [0025].

In regards to claim 2 –

The device of Manchester further allows the relative orientation between the display image (14) of Fig. 3 and viewer(36) of Fig. 8 to be approximately constant. Thus, if a viewer tilts her head, the display image (14) is tilted in the same direction (claim 2: desired orientation), such that the orientation between the viewer and the displayed image (14) is approximately constant (fixed) (claim 2: based on user context or state) [0026].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims **3, 4, 8 – 12, 15**, are rejected under 35 U.S.C. 103(a) as being unpatentable over Manchester (US Publication No. US 2004/0201595 A1) in view of Browning (US Patent No. US 6,707,581 B1).

Manchester teaches the limitation of claims **3, 4, 8 – 12, 15** with the exception of disclosing bar code scanner and product information. However, Browning discloses a handheld device that scans a line of information, such as bar codes. Retrieval software is included to obtain the information associated with the scanned image.

Manchester discloses a self-orienting display that senses the characteristics of an object and automatically rotates and reformats a display image in accordance with those characteristics [0019]. Fig. 1 is an illustration of a self-orienting display (100) comprising a display device (12), a display image (14), a sensor (16), and optional control buttons (18). The self-orienting display (12) may be in the form of any appropriate display device capable of providing the display image (14), such as hand held devices (claim **15**: a mobile device) [0020]. The sensor (16) may include a single sensor or a plurality of sensors [0020]. The sensors (16) can be positioned on the viewer (36) of Fig. 8 and/or on the display device (12) to sense the orientation of the viewer and/or display device [0027]. The display image (14) is oriented with respect to the orientation of the display (12). As the display device (12) oriented as shown in Fig. 1 is rotated, the display image (14) is automatically oriented, such that the appearance of the display image (14) appears to remain approximately stable regardless of the orientation of the display device (12) (claim **15**: automatically orients display based on user perspective) [0025]. The display image (14) may be in the form of a graphic

display image, a textual display image, a video display image, and a functional control button (18), or a combination therefor. The display image (14) may comprise display image portions, such as display image portions (14a) and (14b). As depicted in Fig. 1, a graphic/video display type is provided by the display image portion (14a) and a text display type is provided by the display image portion (14b) [0022]. Manchester includes an authentication component by analyzing the sensed image, which is sensed by the camera (16b) [0036]. The sensed image maybe analyzed for key features [0036].

The invention of Browning comprises a handheld scanner and information retrieval software. The software can retrieve information from a remote source or can be entirely incorporated within the handheld scanner [column 2, lines 38 – 49]. As shown in Fig. 1, the scanner is incorporated within a personal digital assistant (PDA) (10). The scan is performed by sweeping the scan head (16) (claim 8, claim 15: capturing an image) of the handheld scanner (10) across printed media containing information of interest, such as a barcode product identifier on a label (claim 4) [column 2, lines 50 – 57]. The handheld scanner (10) provides a LED/LCD display (22) for displaying the graphical objects. Referring to Fig. 3, the scan head (16), decoder, and other integrated circuits are controlled by means of a microprocessor that is programmed with instructions to carry out the method of Browning (claim 9) [column 3, lines 48 – 51]. The electrical signals generated by the CCD in the scan head (16) are stored in a RAM (18) as a complete image [column 3, lines 7 – 9] for subsequent presentation to a companion information-retrieval agent [column 3, lines 31 – 33]. The handheld scanner can work in conjunction with a separate communications device to provide access to a remote

source and retrieve information that is identified by the scan image (claim **10**) [column 4, lines 3 – 7]. Information can also be directly stored in the handheld scanner, in which case remote communications capabilities are not required [column 4, lines 21 – 23]. In a playback mode, the retrieved information is displayed to the user immediately upon receipt (claim **11, 12**) [column 5, lines 31 – 32]. This information would contain product information and location associated with the barcode (i.e. image) obtained by the information-retrieval agent either from a remote source, such as a personal computer or within the handheld scanner itself. In a storage mode, the retrieved information is stored for later viewing by the user at a time that may be more convenient (claim **3**) [column 5, lines 33 – 34].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a barcode scanner as the camera within the authentication component of Manchester because the barcode scanner would provide a means to sense an object (such as a barcode) resulting in displaying the object within display portion (14a) of Fig. 1 of Manchester associated with the barcode and providing information associated with the barcode of that obtained image within the display portion (14b) of Fig. 1 of Manchester associated with the barcode.

5. Claims **13, 14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Browning (US Patent No. US 6,707,581 B1) in view of Manchester (US Publication No. US 2004/0201595 A1).

Browning teaches the limitations of claims **13**, **14** with the exception of disclosing automatically orienting the rendered graphic objects. However, Manchester discloses a self-orienting display that senses the characteristics of an object and automatically rotates and reformats a display image in accordance with those characteristics.

The invention of Browning comprises a handheld scanner and information retrieval software. The software can retrieve information from a remote source or can be entirely incorporated within the handheld scanner [column 2, lines 38 – 49]. As shown in Fig. 1, the scanner is incorporated within a personal digital assistant (PDA) (10). The scan is performed by sweeping the scan head (16) of the handheld scanner (10) across printed media containing information of interest, such as a barcode product identifier on a label (claim **13**: portable bar code scanning device) [column 2, lines 50 – 57]. The handheld scanner (10) provides a LED/LCD display (22) for displaying the graphical objects (claim **13**: display).

Manchester discloses a self-orienting display that senses the characteristics of an object and automatically rotates and reformats a display image in accordance with those characteristics [0019]. Fig. 1 is an illustration of a self-orienting display (100) comprising a display device (12), a display image (14) (claims **13**: displaying graphical objects), a sensor (16), and optional control buttons (18). The self-orienting display (12) may be in the form of any appropriate display device capable of providing the display image (14), such as hand held devices [0020]. The sensors (16) can be positioned on the viewer (36) of Fig. 8 and/or on the display device (12) to sense the orientation of the viewer and/or display device (claim **14**: means for determining user desire orientation

for display objects) [0027]. The display image (14) is oriented with respect to the orientation of the display (12). As the display device (12) oriented as shown in Fig. 1 is rotated, the display image (14) is automatically oriented, such that the appearance of the display image (14) appears to remain approximately stable regardless of the orientation of the display device (12) (claim 14: automatically orients display based on user perspective) [0025].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the sensors and self-orientation circuitry of Manchester within the display and microprocessor of Browning's handheld scanner to automatically orient the graphical image on the display of Browning because there would be times when the user will scan a barcode located on an object where the handheld scanner would need to be oriented in a manner that is not in alignment with the user's view, causing the graphical object on the display on the handheld scanner to be skewed from the user's viewing. Thus, the user would have to angle their head to view the graphical object on the display when the barcode is being scanned. Therefore, it would have been obvious to include the self-orienting display to prevent the skewing of the user's head to view the graphical object on the display of the handheld scanner.

6. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over in view Toyofuku et al. (US Patent No. US 6,181,380 B1) in view of Manchester (US Publication No. 2004/0201595 A1).

Toyofuku et al. teaches the limitations of claim **17** with the exception of disclosing a an artificial intelligence component that determines an optimal screen orientation for the display based on the user's position. However, Manchester discloses a self-orienting display that senses the characteristics of an object and automatically rotates and reformats a display image in accordance with those characteristics.

Toyofuku et al. teaches an electronic image pickup apparatus (digital camera) for picking up an image by using a photoelectric transfer device (claim **17**: data capture component that captures data) [column 3, lines 50 – 52]. As shown in Fig 3, an image display portion (i.e. screen) of image display means (18) (claim **17**: display) is exposed in the image display window (14a) [column 5, lines 24 – 27]. Referring to Fig. 4, in the lower surface area, a tripod support (60) (claim **17**: holder) having a tripod hole formed in a lower surface area on the outer surface of the rear housing member (14) is formed in a position corresponding to almost the center of the image display window (14a) in the lateral direction [column 7, lines 14 – 19]. The digital camera of Toyofuku et al. also includes in the main body frame (20a), front ends of a light emitting device (24) for displaying an operation of a self-timer (claim **17**: hands free capture of data) [column 5, lines 52 – 53].

Manchester discloses a self-orienting display that senses the characteristics of an object and automatically rotates and reformats a display image in accordance with those characteristics [0019]. Fig. 1 is an illustration of a self-orienting display (100) comprising a display device (12), a display image (14), a sensor (16) (claim **17**: artificial intelligence component), and optional control buttons (18). The self-orienting display

(12) may be in the form of any appropriate display device capable of providing the display image (14), such as hand held devices [0020]. The sensor (16) may include a single sensor or a plurality of sensors [0020]. The display image (14) is oriented with respect to the orientation of the display (12). As the display device (12) oriented as shown in Fig. 1 is rotated, the display image (14) is automatically oriented, such that the appearance of the display image (14) appears to remain approximately stable regardless of the orientation of the display device (12) (claim 17: automatically orients display based on user perspective) [0025].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the self-orienting display of Manchester of the image display portion (i.e. screen) of image display means of Toyofuku et al. because there would be times when the user would like to capture an images that is not directly in front of the user, and would thus need to position the camera in a manner that is not in alignment with the user's view, causing the graphical object on the display on the camera to be skewed from the user's viewing. Thus, the user would have to angel their head to view the graphical object on the display when the image is being taken. Therefore, it would have been obvious to include the self-orienting display to prevent the skewing of the user's head to view the graphical object on the display of the digital camera.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent No. 5,536,930 to Barkan et al..


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michelle K. Lay whose telephone number is (571) 272-7661. The examiner can normally be reached on Monday - Friday, 7:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on (571) 272-7664. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michelle K. Lay
Examiner
Art Unit 2672

06.24.2005 mkl


6/27/05
RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600